

AMENDMENT

Please replace all prior versions and listings of claims with the following listing of claims.

LISTING OF CLAIMS:

1. (Currently Amended) A mobile system responsive to a user generated natural language speech utterance, comprising:

a speech unit that receives the user generated natural language speech utterance and converts the received user generated natural language speech utterance into an electronic signal, ~~said user generated natural language speech utterance having at least one of a query and a command;~~

a natural language speech processing system that receives the electronic signal, that ~~identifies~~ retrieves ~~said at least one of a~~ said query and said or a command from the received electronic signal using data supplied by a plurality of domain agents, that selects at least one domain agent associated with ~~said at least one of said~~ the identified query or ~~and said~~ command from among the plurality of domain agents, and that forwards ~~said the identified at least one of~~ query or ~~and~~ command to ~~said at least one~~ the selected domain agent, wherein ~~said at least one~~ the selected domain agent is an autonomous executable that receives, processes, and responds to ~~said at least one of said~~ the identified query ~~and a said or~~ command, the selected domain agent having access to services associated with each of the plurality of domain agents; and

a transceiver[[,]] in communication with ~~said at least one~~ the selected domain agent, wherein the transceiver receives that transmits an electronic message associated with said at least one of a response to the identified query and or command from the selected domain agent and transmits an electronic message associated the received response.

2. (Currently Amended) The mobile system according to claim 1, wherein the natural language speech processing system ~~further comprises~~ includes an ~~event manager, said event~~

manager that coordinates ~~coordinating~~ interaction ~~between~~ among a plurality of components ~~of associated with~~ the natural language speech processing system.

3. (Currently Amended) The mobile system according to claim 1, wherein the natural language speech processing system ~~further comprises~~ includes:

a speech recognition engine that uses the data supplied by the plurality of domain agents to determine at least one of words or phrases included in the user generated natural language speech utterance; and

a parser that uses the data supplied by the plurality of domain agents to determine ~~determines~~ a domain context for the determined words or phrases, and to transform the determined words or phrases into for the identified query or command user-generated natural language utterance based on the content and context of the user utterance the determined context, wherein the parser invokes the selected domain agent based on the determined context.

4. (Currently Amended) The mobile system according to claim ~~[[1]]~~ 3, wherein the received response includes a text string, and wherein the natural language speech processing system further includes comprising a text to speech engine that uses the data supplied by the plurality of domain agents to convert the ~~converts~~ a text string message to a speech message to be included in the transmitted electronic message.

5. (Currently Amended) The mobile system according to claim 1, wherein ~~said at least one~~ the selected domain agent includes ~~information~~ data for controlling or communicating with a remotely located service.

6. (Currently Amended) The mobile system according to claim 1, wherein ~~said at least one~~ the selected domain agent includes data associated with at least one of driving directions, travel information, restaurant information, vehicle systems information, safety information, or ~~and~~ entertainment information.

7. (Currently Amended) The mobile system according to claim 1, wherein ~~said at least one~~ the selected domain agent includes data for communicating with one or more devices.
8. (Currently Amended) The mobile system according to claim 7, wherein the data for communicating with the one or more devices includes data for controlling the one or more devices.
9. (Original) The mobile system according to claim 7, wherein the transmitted electronic message is sent to the one or more devices.
10. (Currently Amended) The mobile system according to claim 9, wherein at least one of the one or more devices is ~~a device~~ associated with a vehicle.
11. (Currently Amended) The mobile system according to claim 10, wherein at least one of the speech unit, the natural language speech processing system, or the transceiver ~~mobile system~~ is located remotely from the vehicle.
12. (Currently Amended) The mobile system according to claim 10, wherein the device associated with the vehicle is at least one of a navigation system, a vehicle monitoring system, a security system, a vehicle control system, or ~~and~~ a vehicle media system.
13. (Currently Amended) The mobile system according to claim 1, wherein the transmitted electronic message is sent to at least one remotely located service.
14. (Currently Amended) The mobile system according to claim 13, wherein the remotely located service ~~is~~ includes at least one of a payment service provider, a customer relationship management system, a specialized service, a location service, or an ~~and~~ emergency service.

15. (Currently Amended) The mobile system according to claim 13, wherein the ~~transceiver transmits~~ the transmitted electronic message is transmitted via a communication network.

16. (Original) The mobile system according to claim 15, wherein the communication network is a wide area wireless network.

17. (Original) The mobile system according to claim 1, wherein the transceiver is a wide-area RF transceiver.

18. (Currently Amended) The mobile system according to claim 1, wherein the speech unit includes at least one of a speech coder, an array microphone, or ~~and~~ a filter.

19. (Original) The mobile system according to claim 18, wherein the filter employs adaptive echo cancellation.

20. (Original) The mobile system according to claim 18, wherein the array microphone is at least a one-dimensional array.

21. (Original) The mobile system according to claim 18, wherein the speech coder uses an adaptive lossy audio compression.

~~21~~ 22. (Currently Amended) The mobile system according to claim 1, wherein the speech unit is located remotely from at least one of the natural language speech processing system ~~and~~ or the transceiver.

23. (Currently Amended) The mobile system according to claim 1, further comprising at least one of a display ~~and~~ or a keypad.

24. (Original) The mobile system according to claim 1, further comprising a telematics control unit.

25. (Currently Amended) The mobile system according to claim [[1]] 24, wherein at least one of the speech unit, the natural language speech processing system, or the transceiver ~~mobile system~~ is embedded in a ~~telematic~~ telematics control unit.

26. (Currently Amended) The mobile system according to claim 1, wherein at least one of the speech unit, the natural language speech processing system, or the transceiver ~~mobile system~~ is embedded into at least one of a vehicle, a handheld device, a fixed computer, or ~~and~~ a mobile computer device.

27. (Currently Amended) The mobile system according to claim 1, ~~wherein the mobile system is deployed in a~~ further comprising at least one network [[of]] resource shared by a plurality of devices, the shared network resource including ~~using a common base of~~ at least one of the speech unit, the natural language speech processing system, the transceiver, the plurality of agents, user profiles, and event histories, or dialogue histories.

28. (Currently Amended) A method responsive to a user generated natural language speech utterance, comprising:

receiving the user generated natural language speech utterance, ~~the user generated natural language speech utterance having at least one of a query and a command;~~

converting the received user generated natural language speech utterance into an electronic signal;

identifying ~~retrieving said~~ at least one of said a query and said or a command from the electronic signal using data supplied by a plurality of domain agents;

selecting [[a]] at least one domain agent from among the plurality of domain agents, the selected domain agent associated with the identified ~~said at least one of said query and said or command;~~

forwarding ~~said at least one of said~~ the identified query and ~~said or~~ command to ~~said~~ the selected domain agent, wherein ~~said~~ the selected domain agent is an autonomous executable that receives, processes, and responds to ~~said at least one of said~~ the forwarded query and ~~said or~~ command, the selected domain agent having access to services associated with each of the plurality of domain agents; and

receiving a response to the forwarded query or command from the selected domain agent; and

transmitting ~~[[a]]~~ an electronic message associated with the received response ~~said at least one of said query and said command to a remotely located service.~~

29. (Currently Amended) The method according to claim 28, further comprising coding the electronic signal using at least one of a speech coder, an array microphone, or a filter, the electronic signal coded using an adaptive lossy audio compression.

30. (Currently Amended) The method according to claim 28, ~~further comprising selecting a second domain agent, the second~~ wherein the selected domain agent includes data for controlling or communicating ~~associated~~ with at least one of a navigation system, a vehicle monitoring system, a security system, a vehicle control system, or and a vehicle media system; ~~and forwarding a second message to said second domain agent.~~

31. (Currently Amended) The method according to claim 28, wherein ~~said~~ the selected domain agent includes data associated with at least one of driving directions, travel information, restaurant information, vehicle systems information, safety information, or and entertainment information.

32. (Currently Amended) The method according to claim 28, wherein ~~said~~ the selected domain agent includes ~~information~~ data for controlling or communicating with ~~the~~ a remotely located service.

33. (Currently Amended) The method according to claim 32, wherein forwarding the transmitting operation includes sending at least one of a identified query and a or command to the selected domain agent includes transmitting a request to the remotely located service.

34. (Currently Amended) The method according to claim [[28]] 33, wherein the remotely located service device system is associated with a remotely located device.

35. (Currently Amended) The method according to claim [[28]] 33, wherein the transmitted request is transmitted transmitting operation with the remotely located service is via a communication network.

36. (Currently Amended) The method according to claim [[28]], wherein the remotely located service is includes at least one of a payment service provider, a customer relationship management system, a specialized service, a location service, or an and a emergency service.

37. (Currently Amended) The method according to [[28]], wherein the request is transmitted to transmitting operation with the remotely located service is via a wide-area RF transceiver.

38. (Currently Amended) The method according to 28, further comprising filtering the received user generated natural language speech utterance to remove filtering-out background noise of the received user utterance.

39. (Original) The method according to 38, wherein filtering the received user generated natural language speech utterance includes the filtering-out operation is by at least using a filter employing adaptive echo cancellation.

40. (Cancelled)

41. (Currently Amended) The method according to claim 28, ~~wherein the receiving operation of the user generated natural language speech utterance is remotely performed from the other operations~~ further comprising retrieving data from a network resource shared by a plurality of devices, the shared network resource including at least one of a speech unit, a natural language speech processing system, a transceiver, the plurality of agents, user profiles, event histories, or dialogue histories.

42. (Currently Amended) The method according to claim 41, wherein the shared network resource is associated with ~~the receiving operation of the user generated natural language speech utterance is performed in a vehicle.~~

43. (Currently Amended) The method according to claim ~~[[28]]~~ 42, wherein further comprising retrieving data from a the shared network shared source, the network shared source is at least one of an agent, a user profile and a events history resource is located remotely from the vehicle.

43 44. (Currently Amended) A mobile system responsive to a user generated natural language speech utterance, comprising:

first receiving means for receiving ~~that receives~~ the user generated natural language speech utterance, ~~the user generated natural language speech utterance having at least one of a query and a command;~~

converting means ~~that converts~~ for converting the received user generated natural language speech utterance into an electronic signal;

identifying ~~retrieving~~ means ~~that retrieves~~ for identifying ~~said~~ at least one of a said query and said or a command from the electronic signal using data supplied by a plurality of domain agent selecting means that selects a domain agent associated with said at least one of said query and said command agents;

selecting means for selecting at least one domain agent from among the plurality of domain agents, the selected domain agent associated with the identified query or command;

forwarding means for forwarding that forwards said at least one of said the identified query and said or command to said the selected domain agent, wherein the selected domain agent is an autonomous executable that receives, processes, and responds to the forwarded query or command, the selected domain agent having access to services associated with each of the plurality of domain agents, wherein the receiving means further receives; and

second receiving means for receiving a response to the forwarded query or command from the selected domain agent; and

transmitting means for transmitting that transmits a an electronic message associated with the received response from said selected domain agent to a device system.

44 45. (Currently Amended) The mobile system according to claim 43 44, wherein the selected domain agent includes data for controlling or communicating with device system is at least one of a navigation system, a vehicle monitoring system, a security system, a vehicle control system, or and a vehicle media system.

45 46. (Currently Amended) The mobile system according to claim 43 44, wherein the selected at least one domain agent includes data associated with at least one of driving directions, travel information, restaurant information, vehicle systems information, safety information, or and entertainment information.

46 47. (Currently Amended) The mobile system according to claim 43 44, wherein the selected domain agent includes data for controlling or communicating with device system is a remotely located device.

47 48. (Currently Amended) The mobile system according to claim 43 44, wherein the selected domain agent includes data for controlling or communicating with device system is a remotely located service.

~~48~~ 49. (Currently Amended) The mobile system according to claim ~~47~~ 48, wherein the forwarding transmitting means forwards the identified query or command to the selected domain agent by transmitting a request to ~~communicates with~~ the remotely located service via a communication network.

~~49~~ 50. (Currently Amended) The mobile system according to claim ~~47~~ 48, wherein the remotely located service ~~[[is]]~~ includes at least one of a payment service provider, a customer relationship management system, a specialized service, a location service, or an ~~and a~~ emergency service.

~~50~~ 51. (Currently Amended) The mobile system according to ~~43~~ 44, wherein the transmitting means is a wide-area RF transceiver.

~~51~~ 52. (Currently Amended) The mobile system according to ~~43~~ 44, further comprising ~~[[a]]~~ filtering means ~~that filters~~ for filtering the received user generated natural language speech utterance to remove background noise.

~~52~~ 53. (Currently Amended) The mobile system according to claim ~~43~~ 44, further comprising a ~~coder~~ coding means for coding ~~that codes the user generated natural language speech utterance~~ electronic signal using at least one of a speech coder, an array microphone, or a filter.

~~53~~ 54. (Currently Amended) The mobile system according to claim ~~43~~ 44, ~~wherein the receiving means is remotely located from other mobile system components~~ further comprising retrieving means for retrieving data from a network resource shared by a plurality of devices, the shared network resource including at least one of a speech unit, a natural language speech processing system, a transceiver, the plurality of agents, user profiles, event histories, or dialogue histories.

54 ~~55~~. (Currently Amended) The mobile system according to claim ~~53~~ 54, wherein the shared network resource is associated with ~~the receiving means is located at~~ a vehicle.

~~55~~ 56. (Currently Amended) The mobile system according to claim ~~43~~ 55, wherein the shared ~~further comprising data retrieving means that retrieves data from a network shared source, the source is at least one of an agent, data, a user profile and a events history~~ resource is located remotely from the vehicle.